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Amended Claims With Markings Under 37 CFR §1.121(c)(3)

Technology Center 2600

12. (Amended) A tuner, comprising:
tuner circuitry to tune to various television frequencies carrying television
video signals;
a tuner module coupled to adjust the tuner circuitry to scan multiple
channels within a particular locale for corresponding tuning frequencies, the tuner
module storing the tuning frequencies for the particular locale;

[A tuner as recited in claim 11, wherein:]
upon transporting the tuner to a new locale, the tuner module scans multiple
channels within the new local for corresponding tuning frequencies; and
upon transporting the tuner back to the particular locale, the tuner module
retrieves the stored tuning frequencies to restore operation in the particular locale.

32. (Amended) A method comprising the following steps:
receiving a reference to a country;
selecting, based on the country reference, a set of channel-to-frequency
mappings correlating channels to corresponding TV frequencies in the country;
receiving a channel; and
selecting, based on the channel, a TV frequency that maps to the channel[;].

1 All pending claims are listed below for ease of reference.

2
3 1. A television tuner comprising:

4 a country table listing a plurality of countries;

5 multiple channel-to-frequency mapping tables correlating channel numbers
6 to corresponding frequencies for associated countries in the country table, the
7 channel-to-frequency mapping tables being indexed by the country table so that
8 selection of a country in the country table references an associated channel-to-
9 frequency mapping table for the selected country; and

10 a tuning device to tune to a particular frequency within the channel-to-
11 frequency mapping table associated with the selected country upon selection of a
12 corresponding channel.

13
14 2. A television tuner as recited in claim 1, wherein the country table
15 lists the countries according to a uniquely assigned country code.

16
17 3. A television tuner as recited in claim 1, wherein the country table
18 lists the countries according to an International Telecommunications Union (ITU)
19 code.

20
21 4. A television tuner as recited in claim 1, wherein the channel-to-
22 frequency mapping tables also contain a television standard for the associated
23 countries.

1 5. A television tuning component for a television tuning system,
2 comprising:

3 a country table listing a plurality of countries; and

4 multiple channel-to-frequency mapping tables correlating channel numbers
5 to corresponding frequencies for associated countries in the country table, the
6 channel-to-frequency mapping tables being indexed by the country table so that
7 selection of a country in the country table references an associated channel-to-
8 frequency mapping table for the selected country and selection of a channel in the
9 channel-to-frequency mapping table maps to a corresponding frequency.

10
11 6. A television tuning component as recited in claim 5, wherein the
12 country table lists the countries according to a uniquely assigned country code.

13
14 7. A television tuning component as recited in claim 5, wherein the
15 country table lists the countries according to an International Telecommunications
16 Union (ITU) code.

17
18 8. A television tuning component as recited in claim 5, wherein the
19 channel-to-frequency mapping tables also contain a television standard for the
20 associated countries.

21
22 9. A television tuning component as recited in claim 5, embodied in
23 software as a dynamic linked library stored on a computer-readable storage
24 medium.

1 10. A television tuner incorporating the television tuning component as
2 recited in claim 5.

3
4 11. Cancelled

5
6 *Sub* 12. (Amended) A tuner, comprising:
7 *D1* tuner circuitry to tune to various television frequencies carrying television
8 video signals;

9 a tuner module coupled to adjust the tuner circuitry to scan multiple
10 channels within a particular locale for corresponding tuning frequencies, the tuner
11 module storing the tuning frequencies for the particular locale;

12 upon transporting the tuner to a new locale, the tuner module scans
13 multiple channels within the new local for corresponding tuning frequencies; and

14 upon transporting the tuner back to the particular locale, the tuner retrieves
15 the stored tuning frequencies to restore operation in the particular locale.

16
17 13. A television tuning system comprising:
18 tuner circuitry to tune to various television frequencies carrying television
19 video signals;

20 video decoder circuitry coupled to receive a television video signal from the
21 tuner circuitry and to convert the television video signal to digital video data;

22 a tuner module coupled to adjust the tuner circuitry to a particular television
23 frequency;

24 a video decoder module to decode the digital video data according to a
25 particular video standard;

1 wherein the tuner module has a country table listing a plurality of countries
2 and multiple channel-to-frequency mapping tables that provide video standards
3 and correlate channel numbers to corresponding frequencies for associated
4 countries in the country table, the channel-to-frequency mapping tables being
5 indexed by the country table so that selection of a country in the country table
6 references an associated channel-to-frequency mapping table for the selected
7 country; and

8 wherein the tuner module selects a channel-to-frequency mapping table
9 based upon input of a particular country and outputs a video standard to the video
10 decoder for use in decoding the digital video data, the tuner module further
11 selecting a television frequency from the selected channel-to-frequency mapping
12 table based upon input of a corresponding channel and outputting the selected
13 television frequency to the tuner circuitry to cause the tuner circuitry to tune to the
14 selected television frequency.

15
16 14. A television tuning system as recited in claim 13, wherein the
17 country table lists the countries according to an International Telecommunications
18 Union (ITU) code.

19
20 15. A television tuning system as recited in claim 13, wherein the tuner
21 module is embodied as a dynamic linked library.
22
23
24
25

1 16. A television tuning system as recited in claim 13, further comprising
2 a second tuner module different from the tuner module, the second tuner module
3 being used to replace the tuner module during upgrade without replacing the
4 tuning circuitry and the decoding circuitry.

5
6 17. A television tuning system as recited in claim 13, wherein the tuner
7 module supports an application program interface to expose functionality of the
8 tuner module to an application program.

9
10 18. A television tuning system as recited in claim 13, wherein the tuner
11 module stores a set of television frequencies that map to corresponding channels
12 within the particular country for subsequent retrieval.

13
14 19. A television tuning manager for a television tuner, the television
15 tuning manager being implemented in software stored on a computer-readable
16 storage medium, the television tuning device comprising:

17 a country table listing a plurality of countries;

18 multiple channel-to-frequency mapping tables correlating channel numbers
19 to corresponding frequencies for associated countries in the country table, the
20 channel-to-frequency mapping tables being indexed by the country table so that
21 selection of a country in the country table references an associated channel-to-
22 frequency mapping table for the selected country;

23 a code segment to select a channel-to-frequency mapping table based upon
24 input of a particular country; and
25

1 a code segment to output a broadcast frequency from the selected channel-
2 to-frequency mapping table based upon input of a corresponding channel.

3
4 20. A television tuning manager as recited in claim 19, wherein the
5 country table lists the countries according to a uniquely assigned country code.

6
7 21. A television tuning manager as recited in claim 19, wherein the
8 country table lists the countries according to an International Telecommunications
9 Union (ITU) code.

10
11 22. A television tuning manager as recited in claim 19, wherein the
12 channel-to-frequency mapping tables also contain a television standard for the
13 associated countries.

14
15 23. A television tuning manager as recited in claim 19, further
16 comprising a code segment to store a set of broadcast frequencies that map to
17 corresponding channels within the particular country for subsequent retrieval.

18
19 24. A television tuning manager as recited in claim 19, embodied as a
20 software dynamic linked library stored on a computer-readable storage medium.

1 25. A television tuning manager as recited in claim 19, embodied as a
2 computer software module that is dynamically accessible by an application
3 program, the television tuning manager further comprising an application program
4 interface to expose functionality of the television tuning manager to the
5 application program.

6
7 26. An application program interface for a television tuning system, the
8 application program interface being embodied on a computer-readable medium
9 and having methods for performing the following functions:

10 setting a current TV channel;
11 retrieving the current TV channel;
12 setting a country code;
13 retrieving the country code;
14 setting a storage index for regional channel to frequency mappings; and
15 retrieving the storage index.

16
17 27. An application program interface for a television tuning system, the
18 application program interface being embodied on a computer-readable
19 medium and having methods for performing the following functions:

20 retrieving all analog video TV standards supported by the tuning system;
21 retrieving a current analog video TV standard in use;
22 setting a current TV channel;
23 retrieving the current TV channel;
24 retrieving highest and lowest channels available;
25 scanning for a precise signal on the current TV channel's frequency;

1 setting a country code;
2 retrieving the country code;
3 setting a storage index for regional channel to frequency mappings;
4 retrieving the storage index;
5 retrieving a number of TV sources plugged into the tuning system;
6 setting a type of tuning system;
7 retrieving the type of tuning system;
8 retrieving a current video frequency; and
9 retrieving a current audio frequency.
10

11 28. A method comprising the following steps:

12 receiving an ITU (International Telecommunications Union) code for a
13 particular country; and
14 selecting, based on the ITU code, a set of TV channel-to-TV frequency
15 mappings for use in the particular country.
16

17 29. A method as recited in claim 28, further comprising the step of
18 selecting, based on the ITU code, a TV standard for use in the particular country.
19

20 30. A method as recited in claim 28, further comprising the step of
21 storing the selected set of TV channel-to-TV frequency mappings.
22

23 31. A computer-readable medium having computer-executable
24 instructions for performing the steps in the method as recited in claim 28.
25

1 Sub 32. (Amended) A method comprising the following steps:
2 D' receiving a reference to a country;
3 selecting, based on the country reference, a set of channel-to-frequency
4 mappings correlating channels to corresponding TV frequencies in the country;
5 receiving a channel; and
6 selecting, based on the channel, a TV frequency that maps to the channel.

7
8 33. A method as recited in claim 32, further comprising the step of
9 tuning to the TV frequency.
10

11 34. A method as recited in claim 32, wherein the country reference is an
12 ITU (International Telecommunications Union) code.
13

14 35. A method as recited in claim 32, further comprising the step of
15 selecting, based on the country reference, a TV standard for the country.
16

17 36. A method as recited in claim 32, further comprising the step of
18 scanning for a better quality frequency within the channel.
19

20 37. A method as recited in claim 32, wherein the step of selecting a set
21 of channel-to-frequency mappings comprises the following steps:

22 looking up the country in a country table that lists multiple countries; and
23 indexing from an entry for the country in the country table to a particular
24 channel-to-frequency table, the particular channel-to-frequency table containing
25 mappings of channel numbers to TV frequencies for the country.

1
2 38. A method as recited in claim 37, wherein the step of selecting a TV
3 frequency comprises the step of looking up in the particular channel-to-frequency
4 table a TV frequency that corresponds to the channel.
5

6 39. A computer-readable medium having computer-executable
7 instructions for performing the steps in the method as recited in claim 32.
8

9 40. A method comprising the following steps:
10 configuring a tuning system for operation in a first locale by determining
11 tuning frequencies for an associated set of channels;
12 storing the tuning frequencies for the first locale;
13 upon transporting the tuning system to a second locale, reconfiguring the
14 tuning system for operation in the second locale; and
15 upon transporting the tuning system back to the first locale, retrieving the
16 stored tuning frequencies to restore operation in the first locale.
17

18 41. A method as recited in claim 40, wherein the configuring step
19 comprises the step of scanning for optimal tuning frequencies for the associated
20 set of channels.
21

22 42. A computer-readable medium having computer-executable
23 instructions for performing the steps in the method as recited in claim 40.
24
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